Mr. Joseph H. Snyder
Aluminum Company of America
P.O. Box 7500
Lafayette, IN 47903-7500

Re: 157-15580-00001
Significant Permit Modification to
Part 70 permit No.: T157-7101-00001

Dear Mr. Snyder:

Aluminum Company of America - Lafayette Indiana Operations was issued Part 70 operating permit T157-7101-00001 on March 18, 1999 for operation of a secondary aluminum production facility. A letter requesting changes to this permit was received on April 1, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the operation of the following equipment:

Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Nishat Hydari at (973) 575-2555, ext. 3216, or call (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
NH/EVP
cc: File - Tippecanoe County
U.S. EPA, Region V
Tippecanoe County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Aluminum Company of America - Lafayette Operation
3131 Main Street
Lafayette, Indiana 47905

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T157-7101-00001	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: March 18, 1999 Expiration Date: March 18, 2004

Exemption 157-10999-00001, issued on August 10, 1999
Minor Permit Modification No.: 157-11505-00001, issued on November 12, 1999
Exemption 157-11481-00001, issued on November 16, 1999
Significant Permit Modification 157-14533-00001, issued on October 12, 2001

Significant Permit Modification No.: 157-15580-00001	Pages Affected: 11, 42, 62
Issued by: Paul Dubenetzky, Permits Branch Chief Office of Air Quality	Issuance Date:

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Natural Gas Fired Boiler Certification
Quarterly Report
Quarterly Compliance Monitoring Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a secondary aluminum production facility.

Responsible Official:	Charles R. Straface, Location and Operations Manager
Source Address:	3131 Main Street, Lafayette, Indiana 47905
Mailing Address:	P.O. Box 7500, Lafayette, Indiana 47903-7500
SIC Code:	3341 and 3354
County Location:	Tippecanoe
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Ingot Department

(1) the #2-2 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 2, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 89-8;

(2) the #2-3 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 3, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 90-8;

(3) the #2-4 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 4, constructed in 1991, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 88-8;

(4) the #2-5 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 5, constructed in 1988, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 87-8;

(5) the #2-6 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 6, constructed in 1995, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 94-8;

(6) the #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980, with a maximum capacity of 6.2 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 5-8;

(7) the #3 natural gas-fired ingot preheater, referred to as emission unit 20, constructed in 1985, with a maximum heat input capacity of 17.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 29-7;

(8) the #4 natural gas-fired ingot preheater, referred to as emission unit 21, constructed in 1980, with a maximum heat input capacity of 12.3 million Btu per hour, with emissions uncontrolled and exhausting to stack 30-7;

(9) the #7 natural gas-fired ingot preheater, referred to as emission unit 23, constructed in 1997, with a maximum heat input capacity of 20.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;

(10) the #10 natural gas-fired ingot preheater, referred to as emission unit 24, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;

(11) the #11 natural gas-fired ingot preheater, referred to as emission unit 25, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 23-7;

(12) the #12 natural gas-fired ingot preheater, referred to as emission unit 26, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 22-7;

(13) the #13 natural gas-fired ingot preheater, referred to as emission unit 27, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 21-7;

Extrusion - 1

(14) the #5 natural gas-fired press reheat granco furnace, referred to as emission unit 35, constructed in 1975, with a maximum heat input capacity of 18.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 56-12;

(15) the #6 natural gas-fired press reheat granco furnace, referred to as emission unit 36, constructed in 1973, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 54-10;

(16) the #2 natural gas-fired press reheat granco furnace, referred to as emission unit 37, constructed in 1987, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(17) the #12 natural gas-fired press reheat granco furnace, referred to as emission unit 38, constructed in 1989, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(18) the #8 natural gas-fired press reheat granco furnace, referred to as emission unit 40, constructed in 1992, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(19) the #6 natural gas-fired age oven, referred to as emission unit 50, constructed in 1996, with a maximum heat input capacity of 14.0 million Btu per hour, with emissions uncontrolled;

Extrusion - 2

(20) the #1 natural gas-fired horizontal heat treat furnace, referred to as emission unit 70, constructed in 1957, with a maximum heat input capacity of 13.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 68-112;

Tube Mill

(21) the tube mill solvent dip tank system, referred to as emission units 94, 95, and 96, consisting of a 5000 gallon capacity 35 ft dip tank, a 10,000 gallon capacity 50 ft dip tank, a tank farm, and several parts washers, constructed in 1942, with emission uncontrolled;

Plant Miscellaneous

(22) sand blasting operations, referred to as emission unit 108, constructed in 1960, with emissions uncontrolled and exhausting to stack 75-58;

(23) sawing activities located in the carpenter shop, referred to as emission unit 102, constructed in 1960, with emissions controlled by a cyclone, referred to as the #2 sawdust collector and exhausting to stack 72-57.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Plant Miscellaneous

(1) sawing activities located in the carpenter shop, referred to as emission unit 101, constructed in 1960, with emissions controlled by a cyclone, referred to as the #1 sawdust collector, and exhausting to stack 73-57;

Extrusion and Shipping

(2) three (3) Protectsol 512 clear coating applicators, referred to as emission unit 112,

constructed in 1997, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started;

(3) one (1) Protectsol 512 clear coating applicator, to be constructed in 1999, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

Ingot Department

(4) “622" filter boxes for transferring metal from #41 holding furnace to #11 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(5) “622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #12 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(6) “622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(7) “622" filter boxes for transferring metal from 2-3 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(8) “622" filter boxes for transferring metal from 2-4 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(9) “622" filter boxes for transferring metal from 2-5 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(10) “622" filter boxes for transferring metal from 2-6 tilting-melting-holding furnace to #15 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;

(11) the north skim cooling enclosure, referred to as emission unit 16, with emissions exhausting to stack 3-8F;

(12) the south skim cooling enclosure, referred to as emission unit 17, with emissions exhausting to stack 4-8F;

(13) log sawing and lathe operation, referred to as emission unit 31;

(14) the #41 holding furnace, referred to as emission unit 8, with a maximum capacity of 1.2 tons of aluminum per hour and a maximum heat input capacity of 10.0 million Btu per hour, with emissions exhausting to stack 6-8;

Tube Mill

(15) the Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;

(16) the Cleaver brooks boiler, referred to as emission unit 93, constructed in 1975, with a maximum heat input capacity of 2.6 million Btu per hour;

Plant Miscellaneous

(17) the pacific boiler #1, referred to as emission unit 103, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;

(18) the pacific boiler #2, referred to as emission unit 104, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;

(19) the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 72-57;

(20) the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57;

(21) the babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58;

(22) Fifty four (54) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr; and

(23) Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled “Permit Shield.”

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM .

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source’s potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was based on continuous or intermittent data;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);

(5) Any insignificant activity that has been added without a permit revision;

(6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM, .

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice,

either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

(1) The applicable requirements are included and specifically identified in this permit; or

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAM, , upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, , takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, , any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-7-6(6)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch , within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If

due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM, . The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
a)	the #2-2 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 2, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 89-8; and
b)	the #2-3 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 3, constructed in 1994, with a maximum capacity of 6.0 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 90-8;

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 2-2]

Pursuant to CP 157-2316 issued April 9, 1992, the following conditions shall apply:

(a) The PM emission rate from each of the tilting-melting-holding furnaces #2-2 and #2-3 shall not exceed 1.14 pounds per hour. Compliance with this limit will also satisfy the requirements of 326 IAC 6-3-2 (Process Operations).

(b) The melting furnaces #10, #8, and #7 shall not be operated.

Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

D.1.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

(a) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(b) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.

(d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

D.1.3 Fluxing [Agreed Order A-3121, issued July 1, 1997]

Pursuant to A-3121, issued July 1, 1997, the following conditions shall apply:

(a) When it is deemed necessary to add salt flux to furnace #2-3, only salt flux in the solid briquette form shall be used.

(b) ALCOA may perform additional stack testing to demonstrate compliance using the granular flux method.

(c) The OAM agrees to consider a request from ALCOA to modify agreed order A-3121 to allow the use of salt flux in the granular form in the event that salt flux in the briquette form becomes unavailable.

(d) ALCOA must demonstrate that compliance with the permit conditions will be maintained using granular flux.

(e) When granular flux is used, notification shall be made to the OAM within fourteen (14) working days.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing for furnaces #2-2 and #2-3 using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.1.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.1.6 Raw Materials [326 IAC 2-7-6(1),(6)]

In order to comply with the requirements of Condition D.1.1, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visual Inspections

To ensure compliance with Condition D.1.6, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible inspections of the materials added to the furnace each time that materials are added to the furnace.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
a)	the #2-4 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 4, constructed in 1991, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 88-8; and
b)	the #2-5 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 5, constructed in 1988, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 87-8

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from each of the natural gas-fired tilting-melting-holding furnaces #2-4 and #2-5 shall not exceed 18.63 pounds per hour when operating at a process weight rate of 9.58 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

(a) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(b) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.

(d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.5 Raw Materials [326 IAC 2-7-6(1),(6)]

In order to comply with the requirements of Condition D.2.1, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visual Inspections

To ensure compliance with Condition D.2.5, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
the #2-6 natural gas-fired tilting-melting-holding furnace, referred to as emission unit 6, constructed in 1995, with a maximum capacity of 9.58 tons of aluminum per hour, and a maximum heat input capacity of 36 million Btu per hour, with emissions uncontrolled and exhausting to stack 94-8;	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to CP 157-4219, issued June 12, 1995, the following conditions shall apply:

(a) The PM emissions from the tilting-melting-holding furnace #2-6 shall not exceed 1.89 pounds per hour. Compliance with this limit will also satisfy the requirements of 326 IAC 6-3-2 (Process Operations).

(b) The NOx emissions from the tilting-melting-holding furnace #2-6 shall not exceed 5.0 pounds per hour.

(c) The charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating.

(d) Only chunk style flux shall be used in the furnace.

(e) The melting furnace #9, holding furnace #61, and holding furnace #92 shall not be operated.

Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

D.3.2 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

(a) The furnace shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(b) The furnace shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.

(d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM and NOx testing for furnace #2-6 using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.3.1 (a), (b), and (c). These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visual Inspections

To ensure compliance with Condition D.3.1(c), the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.6 Record Keeping Requirements

(a) To document compliance with Condition D.3.5, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.

(b) Pursuant to CP157-4219, records shall be kept of the weight of all materials added to the furnace.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
the #4 natural gas-fired melting furnace, referred to as emission unit 7, constructed in 1980, with a maximum capacity of 6.2 tons of aluminum per hour, and a maximum heat input capacity of 26 million Btu per hour, with emissions uncontrolled and exhausting to stack 5-8;	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to OP 79-06-91-0415, issued May 4, 1988, the charge shall consist of only clean alloys, clean pig, clean slabs, clean purchased scrap, or clean process scrap and chips. The charge shall contain a maximum of twenty percent (20%) material with possible process lubricant coating. Therefore, the requirements of 326 IAC 2-2 (PSD) will not apply.

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from the natural gas-fired melting furnace #4 shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6.0 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.4.3 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

(a) The furnace shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(b) The furnace shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.

(d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Visual Inspections

To ensure compliance with Condition D.4.1, the Permittee shall conduct visual inspections of the materials added to the furnace each time that materials are added to the furnace.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

(a) To document compliance with Condition D.4.6, the Permittee shall maintain records of the visual inspections of the materials added to the furnace each time that materials are added to the furnace.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] **Insignificant Activities**

(a) Fifty four (54) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr.

(b) Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2]

Boiler #3 and Boiler #6 from the boilerhouse must be removed from service before the fifty (50) natural gas fired units are operated. This removal shall result in a net emission reduction of 18.9 tons of NOx per year.

D.5.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total usage of natural gas fuel for the one hundred (100) natural gas fired units shall be limited to 1,177.30 million cubic feet per year (MMCF/yr). This fuel usage limit is equivalent to limiting NOx emissions, based on a NOx emission factor of 0.1 lb/MMBtu to less than 40 tons per year (with the emission reduction credit from removing Boilers #3 and #6) due to this modification. Therefore, the requirements of 326 IAC 2-2 do not apply.

D.5.3 Maximum heat capacity [326 IAC 2-7-5(15)]

Each individual natural gas fired unit shall not have a maximum heat input rate of greater than 6.6 MMBtu/hr, or else the unit will not be considered insignificant.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements

(a) To document compliance with Condition D.5.2, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the natural gas usage limit established in Condition D.5.2.

(1) Calendar dates covered in the compliance determination period;

(2) To certify compliance when burning natural gas, the Permittee shall maintain records of fuel used.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.5 Reporting Requirements

(a) A certification, signed by the responsible official, that certifies the fuel combusted during the period.

(b) A quarterly summary of the information to document compliance with Condition D.5.2(b) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their

equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Plant Miscellaneous, Insignificant Activities
sand blasting operations, referred to as emission unit 108, constructed in 1960, with emissions uncontrolled and exhausting to stack 75-58	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand blasting operations shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.6.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Plant Miscellaneous
sawing activities located in the carpenter shop, referred to as emission units 101 and 102, constructed in 1960, with emissions controlled by two cyclones, referred to as the #1 and #2 sawdust collectors, and exhausting to stacks 73-57 and 72-57. Note: Emission unit 101 is insignificant; emission unit 102 is significant.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sawing in the carpenter shop shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.7.4 Particulate Matter (PM)

The two cyclones for PM control shall be in operation at all times when the sawing process in the carpenter shop is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.5 Visible Emissions Notations

(a) Daily visible emission notations of the cyclone stack exhaust for emission unit 102 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of

the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.6 Record Keeping Requirements

(a) To document compliance with Condition D.7.5, the Permittee shall maintain records of daily visible emission notations of the cyclone stack exhaust for emission unit 102.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

Extrusion

one (1) Protectsol 512 clear coating applicator, referred to as emission unit 112, constructed in 1997, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

one (1) Protectsol 512 clear coating applicator, to be constructed in 1999, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

Shipping

two (2) Protectsol 512 clear coating applicators, referred to as emission unit 112, constructed in 1997, consisting of a roller conveyor that runs the aluminum pieces through an enclosed spray chamber. In the spray chamber there are nozzles that apply the protective coating to the aluminum pieces. The overspray falls to a collection reservoir and is used. There is a pump in the collection reservoir which will be activated whenever the coating is started.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), and CP-157-8509, issued on June 17, 1997, the volatile organic compound (VOC) content of coatings applied to the metal shall be limited to 4.3 pounds of VOC per gallon of coating less water.

(b) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.8.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the four (4) Protectsol 512 clear coating applicators shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.8.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitation contained in Condition D.8.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.4 Record Keeping Requirements

If all coatings applied in a single facility during a month are compliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records shall be kept in accordance with parts (a) and (c) of this condition.

If any coatings applied in a facility during a month are noncompliant coatings as applied pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), then records sufficient to demonstrate daily compliance shall be kept in accordance with parts (b) and (c) of this condition for each day that the noncompliant coating(s) were used.

(a) To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(2) If any compliant coatings, pursuant to 326 IAC 8-2-9 and Condition D.8.1(a), applied in a facility during a month are thinned or are mixed with additives containing volatile organic compounds (VOC) ; then additional records for the affected facility (or facilities) shall be kept sufficient to document that all coatings were compliant as applied. These records shall be kept for the entire calendar month that the thinners or VOC containing additives were used.

(b) To document compliance with Conditions D.8.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1 on a daily basis for each affected facility.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The calculated daily volume-weighted average VOC content of the coatings used in

each affected facility for each day;

(4) The cleanup solvent usage for each day;

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
a)	"622" filter boxes for transferring metal from #41 holding furnace to #11 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
b)	"622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #12 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
c)	"622" filter boxes for transferring metal from 2-2 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
d)	"622" filter boxes for transferring metal from 2-3 tilting-melting-holding furnace to #13 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
e)	"622" filter boxes for transferring metal from 2-4 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour;
f)	"622" filter boxes for transferring metal from 2-5 tilting-melting-holding furnace to #14 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour; and
g)	"622" filter boxes for transferring metal from 2-6 tilting-melting-holding furnace to #15 casting pit, used for adding argon and chlorine, with a maximum heat input capacity of 0.8 million Btu per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the "622" filter boxes shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.9.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.9.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.9.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activity
the Lochnivar boiler, referred to as emission unit 90, constructed in 1995, with a maximum heat input capacity of 0.4 million Btu per hour;	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the PM emissions from the Lochnivar boiler shall not exceed 0.28 pound per million Btu of heat input. This limitation is based on the following equation:

$Pt = 1.09 / (Q^{0.26})$

Where:

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Compliance Determination Requirements

D.10.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.10.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.11 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
a)	the cleaver brooks boiler, referred to as emission unit 93, constructed in 1975, with a maximum heat input capacity of 2.6 million Btu per hour;
b)	the pacific boiler #1, referred to as emission unit 103, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour; and
c)	the pacific boiler #2, referred to as emission unit 104, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

(a) Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the pacific boiler #1, and the pacific boiler #2 shall not exceed 0.8 pound per million Btu of heat input.

(b) Pursuant to the same rule, the PM emissions from the Cleaver brooks boiler shall not exceed 0.6 pound per million Btu of heat input. These limitations are based on the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where C = Maximum ground level concentration with respect to distance from the point source at the “critical” wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour of heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility’s operation permit application, except when some lower capacity is contained in the facility’s operation permit; in which case, the capacity specified in the operation permit shall be used.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent ”N” stacks shall be calculated by weighing each stack height with its particulate matter emissions rate.

Compliance Determination Requirements

D.11.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.11.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Insignificant Activities
a)	the north skim cooling enclosure, referred to as emission unit 16, with emissions exhausting to stack 3-8F;
b)	the south skim cooling enclosure, referred to as emission unit 17, with emissions exhausting to stack 4-8F;
c)	log sawing and lathe operation, referred to as emission unit 31;
d)	the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 74-57;
e)	the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57;
f)	the babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58; and
g)	four (4) Rotoclones, which are mechanical separating devices designed to capture particulate emissions from the sawing, grinding, and working of aluminum pieces. Two rotoclones, one rate at 4000 cfm and the other rated at 1500 cfm, will be installed in extrusion 1. Two rotoclones, each rated at 15,000 cfm, will be installed in extrusion 2.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Particulate Matter (PM) [326 IAC 6-3-2 (Process Operations)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the processes listed above shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements

D.12.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.12.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.13 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	Ingot Department
the #41 holding furnace, referred to as emission unit 8, with a maximum capacity of 1.2 tons of aluminum per hour and a maximum heat input capacity of 10.0 million Btu per hour, with emissions exhausting to stack 6-8	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 Work Practices [Agreed Order A-3659, issued April 15, 1997]

Pursuant to A-3659, issued April 15, 1997, the following conditions shall apply:

(a) The furnaces shall be skimmed after alloying if skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(b) The furnaces shall be skimmed before a heat stir if the skim is over approximately one (1) inch thick and covers more than fifty percent (50%) of the bath.

(c) The work practices stated in (a) and (b) above shall be incorporated into the plant standard operating practice manual as environmental air quality requirements.

(d) The work practices stated in (a) and (b) above shall be reviewed with the respondent's appropriate operating personnel on an annual basis.

Compliance Determination Requirements

D.13.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.13.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.14 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Ingot Department

(1) the #3 natural gas-fired ingot preheater, referred to as emission unit 20, constructed in 1985, with a maximum heat input capacity of 17.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 29-7;

(2) the #4 natural gas-fired ingot preheater, referred to as emission unit 21, constructed in 1980, with a maximum heat input capacity of 12.3 million Btu per hour, with emissions uncontrolled and exhausting to stack 30-7;

(3) the #7 natural gas-fired ingot preheater, referred to as emission unit 23, constructed in 1997, with a maximum heat input capacity of 20.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;

(4) the #10 natural gas-fired ingot preheater, referred to as emission unit 24, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 24-7;

(5) the #11 natural gas-fired ingot preheater, referred to as emission unit 25, constructed in 1966, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 23-7;

(6) the #12 natural gas-fired ingot preheater, referred to as emission unit 26, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 22-7;

(7) the #13 natural gas-fired ingot preheater, referred to as emission unit 27, constructed in 1967, with a maximum heat input capacity of 13.5 million Btu per hour, with emissions uncontrolled and exhausting to stack 21-7;

Extrusion - 1

(8) the #5 natural gas-fired press reheat granco furnace, referred to as emission unit 35, constructed in 1975, with a maximum heat input capacity of 18.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 56-12;

(9) the #6 natural gas-fired press reheat granco furnace, referred to as emission unit 36, constructed in 1973, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled and exhausting to stack 54-10;

(10) the #2 natural gas-fired press reheat granco furnace, referred to as emission unit 37, constructed in 1987, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(11) the #12 natural gas-fired press reheat granco furnace, referred to as emission unit 38, constructed in 1989, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(12) the #8 natural gas-fired press reheat granco furnace, referred to as emission unit 40, constructed in 1992, with a maximum heat input capacity of 16.0 million Btu per hour, with emissions uncontrolled;

(13) the #6 natural gas-fired age oven, referred to as emission unit 50, constructed in 1996, with a maximum heat input capacity of 14.0 million Btu per hour, with emissions uncontrolled;

Extrusion - 2

(14) the #1 natural gas-fired horizontal heat treat furnace, referred to as emission unit 70, constructed in 1957, with a maximum heat input capacity of 13.2 million Btu per hour, with emissions uncontrolled and exhausting to stack 68-112;

Tube Mill

(15) the tube mill solvent dip tank system, referred to as emission units 94, 95, and 96, consisting of a 5000 gallon capacity 35 ft dip tank, a 10,000 gallon capacity 50 ft dip tank, a tank farm, and several parts washers, constructed in 1942, with emission uncontrolled;

There are no specific applicable requirements for these emission units.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Aluminum Company of America - Lafayette Operation
Source Address: 3131 Main Street, Lafayette, Indiana 47905
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500
Part 70 Permit No.: T157-7101-00001

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Aluminum Company of America - Lafayette Operation
Source Address: 3131 Main Street, Lafayette, Indiana 47905
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500
Part 70 Permit No.: T157-7101-00001

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2

9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- C The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Aluminum Company of America - Lafayette Operation
Source Address: 3131 Main Street, Lafayette, Indiana 47905
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500
Part 70 Permit No.: T157-7101-00001

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Report period
Beginning: _____
Ending: _____

Boiler Affected	Alternate Fuel	Days burning alternate fuel From	To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Aluminum Company of America - Lafayette Operation
Source Address: 3131 Main Street, Lafayette, Indiana 47905
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500
Part 70 Permit No.: T157-7101-00001
Facility: one (100) hundred natural gas fired units
Parameter: natural gas usage
Limits: natural gas usage not to exceed 1,177.3 MMCF per year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Natural Gas Usage This Month	Natural Gas Usage Previous 11 Months	Natural Gas Usage 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this month.
9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Aluminum Company of America - Lafayette Operation
Source Address: 3131 Main Street, Lafayette, Indiana 47905
Mailing Address: P.O. Box 7500, Lafayette, Indiana 47903-7500
Part 70 Permit No.: T157-7101-00001

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit

Source Name:	Aluminum Company of America - Lafayette Indiana Operations
Source Location:	3131 East Main Street, Lafayette, IN 47903
County:	Tippecanoe
Operation Permit No.:	SSM 157-15785-00001 and SPM 157-15580-00001
SIC Code:	3341, 3354
Permit Reviewer:	NH/EVP

On June 17, 2002, the Office of Air Quality (OAQ) had a notice published in the Journal & Courier, Lafayette, Indiana, stating that Aluminum Company of America - Lafayette Indiana Operations had applied for a modification to their secondary aluminum production facility. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 17, 2002, Pat Gorman, consultant for Aluminum Company of America - Lafayette Indiana Operations submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

Comment 1

The permit states that there are a total of fifty (50) heating units in Section D.5(a) as well as Section A.3(22). The actual number of heating units originally installed was fifty four (54) units. Please make these corrections.

Response 1

Aluminum Company of America was issued significant source modification 157-14486-00001 on September 18, 2001. The modification was for the construction of natural gas fired units with a total maximum design capacity of 134.4 MMBtu/hr with each individual unit not exceeding 6.6 MMBtu/hr. When applying for the permit the source had estimated to construct fifty (50) natural gas fired units. The actual number of units that were constructed was fifty four (54). The maximum design capacity of 134.4 MMBtu/hr has not been exceeded and each individual unit has not exceeded 6.6 MMBtu/hr. Thus, the following changes will be made to Section A.3 and to the facility description box in Section D.5.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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(22) Fifty **four** (5~~0~~**4**) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr; and

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

(a) Fifty **four** (5~~0~~**4**) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr.

(b) Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Aluminum Company of America - Lafayette Indiana Operations
Source Location:	3131 East Main Street, Lafayette, IN 47903
County:	Tippecanoe
SIC Code:	3341, 3354
Operation Permit No.:	T157-7101-00001
Operation Permit Issuance Date:	March 18, 1999
Significant Source Modification No.:	157-15785-00001
Significant Permit Modification No.:	157-15580-00001
Permit Reviewer:	NH/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Aluminum Company of America - Lafayette Indiana Operations relating to the operation of a secondary aluminum production facility.

History

On June 4, 2001, Aluminum Company of America - Lafayette Indiana Operations submitted an application to the OAQ requesting the installation of fifty (50) natural gas fired units. The units were installed to reduce the plant steam requirements and to achieve higher energy efficiency. With the installation of the fifty (50) units, the source removed boiler #3 and boiler #6 from the boiler house. The source was granted Significant Source Modification 157-14486-00001, issued on September 18, 2001 (for the construction of these units) and Significant Permit Modification 157-14533-00001, issued on October 12, 2001 (for the operation of these units).

On April 1, 2002, Aluminum Company of America - Lafayette Indiana Operations submitted an application to the OAQ requesting the installation of an additional fifty (50) natural gas fired units. This requested approval will establish the combined natural gas usage limit (1,177.3 MMCF/yr) for the fifty (50) natural gas fired units previously permitted and the new fifty (50) natural gas fired units to be constructed, to render the requirements of Prevention of Significant Deterioration not applicable.

Aluminum Company of America - Lafayette Indiana Operations was issued a Part 70 permit on March 18, 1999.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following similar permitted emission units and pollution control devices:

Fifty (50) natural gas fired units, constructed in 2001, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-7-5(16):

Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

Existing Approvals

The source was issued a Part 70 Operating Permit T157-7101-00001 on March 18, 1999. The source has since received the following approvals:

(a) Exemption 157-10999-00001, issued on August 10, 1999;

(b) Minor Permit Modification No.: 157-11505-00001, issued on November 12, 1999;

(c) Exemption 157-11481-00001, issued on November 16, 1999;

(d) Significant Source Modification 157-14486-00001, issued on September 18, 2001; and

(e) Significant Permit Modification 157-14533-00001, issued on October 12, 2001.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

(a) Significant Permit Modification 157-14533-00001, issued on October 12, 2001

Condition D.5.2: The NOx emissions from the fifty (50) natural gas fired units shall have the potential to emit less than 58.87 tons per 12 consecutive month period, based on a maximum design capacity of 134.4 MMBtu/hr and an NOx emission factor of 0.1 lb/MMBtu. This limit is required to limit the potential to emit of NOx to less than 40 tons per 12 consecutive month period (after netting). Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Reason not incorporated: New language that includes the natural gas usage limit for all one hundred (100) natural gas fired units, including the fifty (50) natural gas fired units permitted under SSM 157-14486-00001, issued on September 18, 2001 and SPM 157-14533-00001, issued on October 12, 2001 and the fifty (50) natural gas fired units to be constructed will replace Condition D.5.2. The language is as follows:

The total usage of natural gas fuel for the one hundred (100) natural gas fired units shall be limited to 1,177.30 million cubic feet per year (MMCF/yr). This fuel usage limit is equivalent to limiting NOx emissions, based on a NOx emission factor of 0.1 lb/MMBtu to less than 40 tons per year (with the emission reduction credit from removing Boilers #3 and #6) due to this modification. Therefore, the requirements of 326 IAC 2-2 do not apply.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 1, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Note: The following table represents the potential to emit of the fifty (50) new natural gas fired units only.

Pollutant	Potential To Emit (tons/year)
PM	3.87
PM-10	15.46
SO_2	1.22
VOC	11.19
CO	170.86
NO_x	203.41

HAP's	Potential To Emit (tons/year)
Benzene	negligible
Dichlorobenzene	negligible
Formaldehyde	less than 10
Hexane	less than 10
Toluene	negligible
Lead	negligible
Cadmium	negligible
Chromium	negligible
Manganese	negligible
Nickel	negligible
TOTAL	less than 25

Justification for Modification

The Title V permit is being modified through a Significant Source Modification. This modification is being performed pursuant to 326 IAC IAC 2-7-10.5(f)(4) because the source has the potential to emit CO and NOx greater than 25 tons per year. This modification will give the source approval to construct the new emission units. A Significant Permit Modification (157-14533-00001) will also be drafted and issued and will incorporate the source modification into the Part 70 permit and give the source approval to operate the new emission units.

County Attainment Status

The source is located in Tippecanoe County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Tippecanoe County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)

PM	250.87
PM-10	239.57
SO_2	495.82
VOC	32.77
CO	59.62
NOx	154.46

This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is one of the 28 listed source categories.

These emissions are based upon the Title V (T157-7101-00001) issued to the source on March 18, 1999.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)					
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X
Limited Emissions*	1.12	4.47	0.35	3.24	49.45	58.87
Contemporaneous Decreases**	1.44	1.44	0.15	1.04	15.82	18.90
Limited Net Emissions	-0.32	3.03	0.20	2.20	33.63	39.97
PSD Increment Thresholds	25	15	40	40	100	40

* Limited Emissions are based on the one hundred (100) natural gas fired units taking a combined natural gas usage limit of 1,177.3 MMCF/yr

** Contemporaneous Decreases are from the removal of Boiler #3 and Boiler #6 from the boiler house. Actual data for years 1999 and 2000 was used to determine emissions

Note: The removal of Boiler #3 and Boiler #6 from the boiler house are the only decreases from the past five (5) years.

Since the natural gas usage limit is for all one hundred (100) natural gas fired units, including the fifty (50) natural gas fired units permitted under SSM 157-14486-00001, issued on September 18, 2001 and SPM 157-14533-00001, issued on October 12, 2001 and the fifty (50) natural gas fired units to be constructed, the contemporaneous emission increase due to the modification will be based on the addition of one hundred (100) natural gas fired units and contemporaneous decrease will be based on the removal of Boiler #3 and Boiler #6 (these boilers have already been shut down and are no longer in use).

This modification to an existing major stationary source is not major because the net emissions increase due to the modification is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

(a) The one hundred (100) natural gas fired units, are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Da, Db or Dc), because none of the one hundred (100) natural gas fired units are boilers.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

This proposed modification is not considered a major modification because it will limit natural gas usage to 1,177.3 MMCF/yr. The NOx potential to emit based on the natural gas usage limit of 1,177.3 MMCF/yr will be 58.87 tons per 12 consecutive month period. The contemporaneous decreases from the removal of Boiler #3 and Boiler #6 will be 18.9 tons of NOx per year. Therefore, the net NOx emissions will be less than 40 tons per year. All other criterial pollutants will also be below the PSD increment threshold. This usage limit will limit the potential to emit to less than applicable PSD significant emission levels for any regulated pollutant which makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)

This rule does not apply to the one hundred (100) natural gas fired units because none of the units are indirect heating units (boilers).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise

through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to the one hundred (100) natural gas fired units.

Changes Proposed

1) The fifty (50) natural gas fired units are being added to Section A.3.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

Plant Miscellaneous

(17) the pacific boiler #1, referred to as emission unit 103, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;

(18) the pacific boiler #2, referred to as emission unit 104, constructed in 1940, with a maximum heat input capacity of 2.6 million Btu per hour;

(19) the box shop sawdust collector exhaust, referred to as emission unit 92, with emissions exhausting to stack 72-57;

(20) the paint shop exhaust, referred to as emission unit 105, with emissions exhausting to stack 85-57;

(21) the babbit melting furnace, referred to as emission unit 109, with emissions exhausting to stack 81-58; ~~and~~

(22) Fifty (50) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr~~.~~**; and**

(23) Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.

2) The new fifty (50) natural gas fired units are being added to Section D.5. A new PSD minor limit, recordkeeping and reporting are being added to the D.5 conditions.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]	**Insignificant Activities**
(a)	Fifty (50) natural gas fired units, with a total maximum design capacity of 134.4 million (MM) British thermal units per hour (Btu/hr). Each individual heating unit will have a heat input rate in the range of 0.05 MMBtu/hr up to a maximum of 6.6 MMBtu/hr.
(b)	**Fifty (50) natural gas fired units, each with a maximum heat input rate of 6.6 MMBtu/hr.**
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)	

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2]

Boiler #3 and Boiler #6 from the boilerhouse must be removed from service before the fifty (50) natural gas fired units are operated. This removal shall result in a net emission reduction of 18.9 tons of NOx per year.

D.5.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

~~The NOx emissions from the fifty (50) natural gas fired units shall have the potential to emit less than 58.87 tons per 12 consecutive month period, based on a maximum design capacity of 134.4 MMBtu/hr and an NOx emission factor of 0.1 lb/MMBtu. This limit is required to limit the potential to emit of NOx to less than 40 tons per 12 consecutive month period (after netting). Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.~~

The total usage of natural gas fuel for the one hundred (100) natural gas fired units shall be limited to 1,177.30 million cubic feet per year (MMCF/yr). This fuel usage limit is equivalent to limiting NOx emissions, based on a NOx emission factor of 0.1 lb/MMBtu to less than 40 tons per year (with the emission reduction credit from removing Boilers #3 and #6) due to this modification. Therefore, the requirements of 326 IAC 2-2 do not apply.

D.5.3 Maximum heat capacity [326 IAC 2-7-5(15)]

Each individual natural gas fired unit shall not have a maximum heat input rate of greater than 6.6 MMBtu/hr, or else the unit will not be considered insignificant.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements

(a) To document compliance with Condition D.5.2, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) through (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the natural gas usage limit established in Condition D.5.2.

(1) Calendar dates covered in the compliance determination period;

(2) To certify compliance when burning natural gas, the Permittee shall maintain records of fuel used.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.5 Reporting Requirements

(a) A certification, signed by the responsible official, that certifies the fuel combusted during the period.

(b) A quarterly summary of the information to document compliance with Condition D.5.2(b) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month

period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

3) A new reporting form to show compliance with Condition D.5.2 will be added to the permit.

Conclusion

The construction and operation of the fifty (50) natural gas fired units shall be subject to the conditions of the attached proposed **Significant Source Modification No. 157-15785-00001**.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Aluminum Company of America - Lafayette Indiana Operations
Address City IN Zip: 3131 East Main Street, Lafayette, IN 47903
Title V Significant Source Modification: 157-15785
Plt ID: 157-00001
Reviewer: NH/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
134.4	1177.3

Note: The fifty (50) natural gas fired units will have a total design capacity of 134.4 MMBtu/hr
Each individual heating unit will have a heat input rate in the range of 0.5 MMBtu/hr up to a maximum of 6.6 MMBtu/hr

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	1.12	4.47	0.35	58.87	3.24	49.45

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Aluminum Company of America - Lafayette Indiana Operations
Address City IN Zip: 3131 East Main Street, Lafayette, IN 47903
Title V Significant Source Modification: 157-15785
Plt ID: 157-00001
Reviewer: NH/EVP

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.236E-03	7.064E-04	4.415E-02	1.060E+00	2.001E-03

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.943E-04	6.475E-04	8.241E-04	2.237E-04	1.236E-03

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Aluminum Company of America - Lafayette Indiana Operations
Address City IN Zip: 3131 East Main Street, Lafayette, IN 47903
Title V Significant Source Modification: 157-15785
Plt ID: 157-00001
Reviewer: NH/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
330.0	2890.8

Note: The fifty (50) natural gas fired units will have a total design capacity of 330 MMBtu/hr
Each individual heating unit will have a maximum heat input rate 6.6 MMBtu/hr

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	2.75	10.99	0.87	144.54	7.95	121.41

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: Aluminum Company of America - Lafayette Indiana Operations
Address City IN Zip: 3131 East Main Street, Lafayette, IN 47903
Title V Significant Source Modification: 157-15785
Plt ID: 157-00001
Reviewer: NH/EVP

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.035E-03	1.734E-03	1.084E-01	2.602E+00	4.914E-03

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	7.227E-04	1.590E-03	2.024E-03	5.493E-04	3.035E-03

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Company Name: Alumninum Company of America - Lafayette Indiana Operations
Address City IN Zip: 3131 East Main Street, Lafayette, IN 47903-7500
Title V Significant Source Modification: 157-15785
Plt ID: 157-00001
Reviewer: NH/EVP

Uncontrolled Emissions

Emissions Netting Analysis	Tons/yr					
Pollutant	PM	PM10	SO2	NOx	VOC	CO
Contemporaneous Increases*	1.12	4.47	0.35	58.87	3.24	49.45
Contemporaneous Increases**	2.75	10.99	0.87	144.54	7.95	121.41
Contemporaneous Decreases	1.44	1.44	0.15	18.90	1.04	15.82
Net Emissions	2.43	14.02	1.07	184.51	10.15	155.04
PSD or Offset Significant Level	25	15	40.0	40.0	40.0	100.0

Notes
*Contemporaneous Increases are from the installation of fifty (50) small natural gas fired units
**Contemporaneous Increases are from the installation of fifty (50) small natural gas fired units
Contemporaneous Decreases are from elimination of boiler house boilers #3 and #6 (data is from years 1999 and 2000)

Limited Emissions

Emissions Netting Analysis	Tons/yr					
Pollutant	PM	PM10	SO2	NOx	VOC	CO
Limited Emissions*	1.12	4.47	0.35	58.87	3.24	49.45
Contemporaneous Decreases	1.44	1.44	0.15	18.9	1.04	15.82
Limited Net Emissions	-0.32	3.03	0.20	39.97	2.20	33.63
PSD or Offset Significant Level	25	15	40.0	40.0	40.0	100.0

Notes
*Limited Emissions are based on natural gas usage of 1,175 MMCF per year

Calculations for Contemporaneous Decreases

	PM	PM10	SOx	NOx	VOC	CO
Natural Gas Emissions (tons/yr) (1999)	1.54	1.54	0.12	20.2	1.11	16.97
Natural Gas Emissions (tons/yr) (2000)	1.32	1.32	0.1	17.39	0.96	14.61
Fuel Oil Emissions (tons/yr) (1999)	0.0196	0.0196	0.0695	0.1958	0.0033	0.049
Fuel Oil Emissions (tons/yr) (2000)	0.0014	0.0014	0.0049	0.0138	0.0002	0.0035

Total Emissions (tons/yr) (1999)	1.56	1.56	0.19	20.40	1.11	17.02
Total Emissions (tons/yr) (2000)	1.32	1.32	0.10	17.40	0.96	14.61
Contemporaneous Decreases	1.44	1.44	0.15	18.90	1.04	15.82

Notes
Natural gas emissions and fuel oil emissions for 1999 and 2000 were provided by the source
Total Emissions = Natural Gas Emissions (year) + Fuel Oil Emissions (year)
Contemporaneous Decreases = (Total Emissions (1999) + Total Emissions (2000)) /2